

SOFTWARE HELP

Reducing shake on handheld video footage

Q I previously used a JVC video camera with 'steadycam' action to produce videos with Ulead VideoStudio. On my last holiday I used the video capture on my Sony Cybershot camera, which resulted in shaky footage. Is there a video-editing program that can remove wobble?

Tony Sparkes
arsparkes@tiscali.co.uk

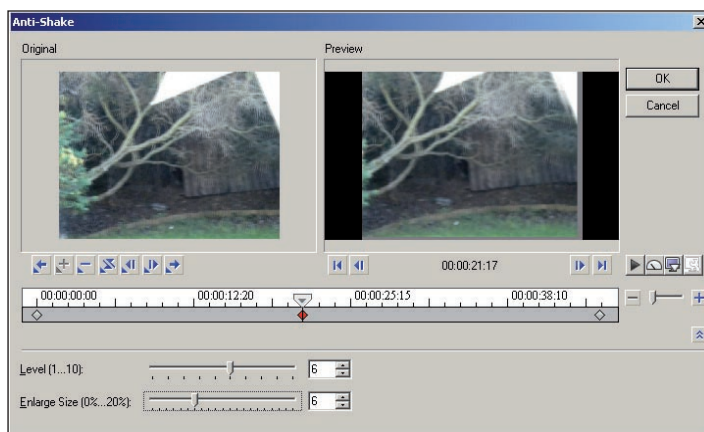
A For those who aren't familiar with these technologies, there are three ways to reduce shakes in video footage. By far the most effective is to use a video camera with optical image stabilisation. This employs a gyroscopic sensor to detect shakes and move the lens elements that bend the incoming light to counteract them.

Budget video cameras rarely have this feature, and use an electronic equivalent. This detects rapid movement in the captured image and counteracts it by shifting the image, frame by frame, before saving it to tape, disk or memory card. The camera uses a digital zoom to discard the outer edges of the captured video. This avoids black bars appearing along the edges as the picture is shifted around, but it also means some of the

captured detail is discarded. Electronic stabilisation tends not to work as well as optical systems, as it sometimes mistakes moving subjects for camera shake and adds, rather than removes, wobbles.

It sounds like your Sony digital camera either uses this second type or none at all, which leads us to the third option: to apply shake reduction in software. This uses the same technique – and suffers the same drawbacks – as electronic stabilisation in the camera, but you do get to compare before-and-after settings and perhaps even adjust some custom controls.

Of the six video-editing applications in this month's Labs test (see page 128), all except Sony Vegas Movie Studio include a stabilisation effect, although their effectiveness varies greatly. In direct comparisons, Pinnacle and Adobe's stabilisation effects were pretty hopeless, Magix's was a little better, CyberLink's was pretty decent and Ulead VideoStudio's was the best of all. This feature was added to VideoStudio in version 10, and seeing as this is the brand of software you already use, it's well worth upgrading if you're using an earlier version. The effect in question is called Anti-Shake, and you'll find it in the Video Filter drop-down list under the Effects tab. **BP**



◀ VideoStudio includes a highly effective video-stabilisation effect since version 10. The default settings work well, but increase the Level and Enlarge Size controls if you need stronger stabilisation at the expense of image detail

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Ben Pitt

Professional musician and keen photographer Ben Pitt gives advice on using creative software.



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Feedback: I can't get a certain ratio

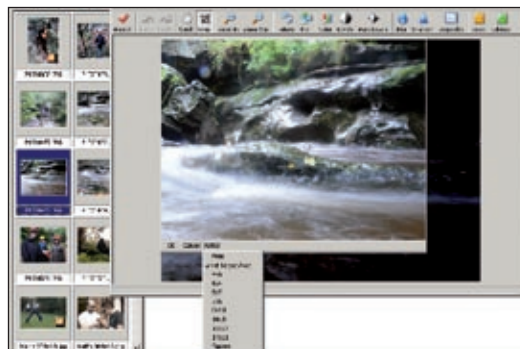
Regarding the query from Steve Webb in Shopper 238, the program he needs for automatically cropping and printing any size of image on to any size of paper using any custom layout he wishes is FotoSlate 4, which is downloadable from www.acdsee.com.

I've been using Fotoslate since version 2 and, although I have seen many other printing programs, I have never found anything comparable. Over the years I have created a huge range of custom page layouts to cater for every possible situation. Once Steve has tried it, he will never need anything else.

Richard Sutton

A We haven't used ACDSee FotoSlate until now, but a quick play with the 30-day trial version reveals that it is indeed an excellent application for a wide variety of photo-printing jobs, and its price of £15 seems reasonable. Importing photos directly on to a

page automatically crops them to fit the print aspect ratio, but the Editor includes a Crop tool with various preset aspect ratios; choosing Fit Target Area will match the selected paper type. Thanks for the recommendation, Richard. **BP**



▲ ACDSee FotoSlate 4 makes it easy to crop photos to match the shape of the paper on which you're printing

Splitting minutes and seconds in Excel

Q I have a column of elapsed times in Excel that are written in different formats such as 3m 11s and 30s. I want to add them up and split the data to get the seconds into one column and the minutes into another. How do I do this?

Sue Edwards

A If all your times were in the standard time format, this would be a relatively simple task. Excel has a menu command, Text To Columns, which you'll find on the Data menu. To use it, you highlight the data to be separated, let Excel work out how it thinks the data should be split and, if necessary, tweak the splitting to get exactly what you need. However, your data isn't completely uniform, so you need to use functions to split the data.

We'll look first at getting the minute value extracted from the text. In theory, this should be as simple as looking for the left-hand values up to the point where you find an 'm' character in the string. So if you have:

36m 27s

You'd want to extract the 36. This can be done using the following:

```
=LEFT(A1,FIND("m",A1)-1)
```

It can then be converted from the characters 36 to the value 36 using the Value function:

```
=VALUE(LEFT(A1,FIND("m",A1)-1))
```

However, there's a slight snag. If you try this on a cell where the time is 27s (with no minutes), you'll find that Excel returns #VALUE to tell you that you've tried to look for something that doesn't exist: an 'm' in the text you're searching.

To get around this, you have to get Excel to check whether there's an error returned by the formula. If there is, we can assume that we're dealing with a cell that contains only seconds, not minutes, so we want to return 0 as the number of minutes. To do this, we use ISERROR:

```
=IF(ISERROR(FIND("m",A1)),0,VALUE(LEFT(A1,FIND("m",A1)-1)))
```

Now we come to the seconds. If we ignore one particular set of values, this is simpler. The seconds (including the s) occupy the right-hand three characters of the original text. So what we want to do is to take the left-hand two characters of the right-hand three characters, then convert that to a value:

```
=VALUE(LEFT(RIGHT(A1,3),2))
```

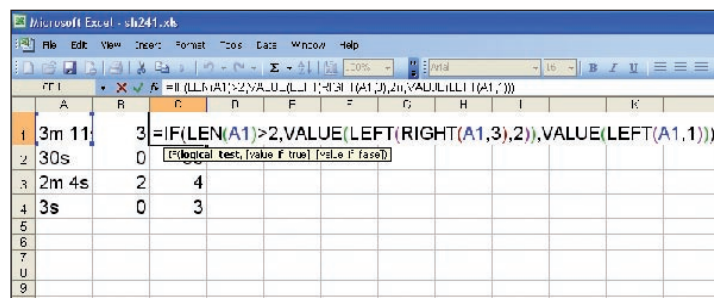
So far, so good. If you happen to have a value such as 1m 5s, it's not a problem because the right-hand three characters are space, 5, s, the s gets dropped, and the Value function ignores the space so you get a result of 5.

There is still a problem, though. What happens if we have a time that is just, say, 9s? This function then fails because you can't have the right-hand three characters of a character string that's only two characters long.

To get around this, we first have to check the length of the overall string. Provided that it's longer than two characters long, we're fine and can use the formula shown above. If not, we simply take the very left-hand character as we must be looking at a string that's of the form 8s, for example:

```
=IF(LEN(A1)>2,VALUE(LEFT(RIGHT(A1,3),2)),VALUE(LEFT(A1,1)))
```

You now have the minutes in one column and the seconds in another, and can do your arithmetic to get the total time in seconds. **KE**



◀ You can split time into minutes and seconds using functions

How do I save mailmerge documents?

Q I've run a mailmerge in Word 2003, and it's created a file of a couple of hundred letters. I want to be able to save them as individual documents so I can email them rather than wasting the paper. Is there a way to do this?

K Singh

A You can split the document into a set of separate letters, although we're not sure how much this would speed up the process. You'd still have to take each letter and attach it to an email, and it may be simpler to select the letter, copy the text and paste it into the body of the email.

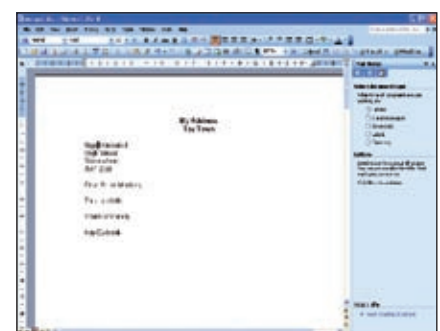
The VBA macro below takes a document that contains individual letters and creates a separate letter for each recipient. The tricky bit is working out how to identify the different recipients. We chose to use the first line of the name and address as the name of the document so each is easy to identify.

The macro is fairly simple; each page (or each letter) is a single section, so the first thing it does is to count the number of sections. The loop then takes the first section and cuts it, pasting it to a new document. This means that the next time round the loop, the next letter is the first section so can again be cut out.

We next need to save the newly created document. In our letters, we have a two-line address, so the name of the recipient at the top of the address is located in paragraph 4; you may need to alter this line so it gets the correct paragraph. The paragraph has a paragraph marker at the end, so the next step is to take the left-hand characters up to but not including the final character. Finally, the document is saved. You'd need to change c:\send to the location where you actually want the letters saved. **KE**

```
Sub splitmerge()
Selection.EndKey Unit:=wdStory
numlet = Selection.Information (wdActiveEndSectionNumber)
Selection.HomeKey Unit:=wdStory
Countlet = 1
While Countlet < numlet
ActiveDocument.Sections.First.
Range.Cut
Documents.Add
With Selection
.Paste
.EndKey Unit:=wdStory
.MoveLeft Unit:=wdCharacter,
Count:=1
.Delete Unit:=wdCharacter,
Count:=1
```

```
End With
thisname = ActiveDocument.
Paragraphs(4).Range.Text
thisname = Left(thisname,
Len(thisname) - 1)
DocName = "c:\send\" & thisname &
".doc"
ActiveDocument.SaveAs FileName:=
DocName, FileFormat:=wdFormat
Document
ActiveWindow.Close
Countlet = Countlet + 1
Wend
End Sub
```



▲ You can save individual letters from mailmerges in Microsoft Word

Copying text from a PDF file

Q My computer runs Windows XP Home. I am trying to copy part of a document from an Adobe PDF file to a desktop publishing (DTP) program that you gave away on your cover disc.

I use the Snapshot Tool to copy the part I require and then start the DTP program. I can paste the saved part into the DTP application, but it appears blurred as though in a different resolution, and text is totally unreadable.

The same problem occurs in other DTP programs. Can you tell me what's causing this and how to fix it?

Don Robertson

robertsondon20002000@yahoo.com

A The problem you're experiencing is a result of the difference between bitmap and vector images. TrueType fonts describe the appearance of text using points – known as vector coordinates – which are joined together by curved lines. This makes it possible to change the size of text without it becoming blocky, as the picture on the right demonstrates.

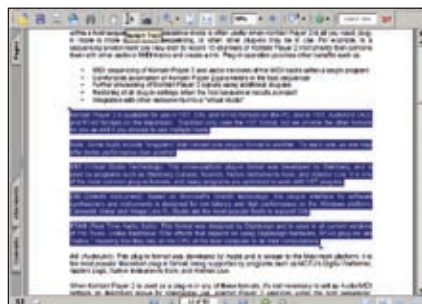
Adobe Reader's Snapshot Tool button captures a screenshot of whatever is visible on

the screen. It doesn't discriminate between text and pictures, capturing everything together as a bitmap image – a bit like taking a photo of the screen. As a result, the vector curves that make up text are converted into a bitmap at whatever resolution is currently displayed on the monitor. From then on, any changes in the size of the text will corrupt the smoothness of its outlines.

The best way to extract text from a PDF – or any other – file for use in another application is to copy it as text data, capturing the words themselves rather than just their visual

appearance. Do this with the Select Tool button in Adobe Reader, drag the mouse across the text you want and type Ctrl-C to copy it.

The downside is that you may lose the layout and formatting of the document, depending on the application you're pasting into, so you may have to re-create the original PDF's layout in your desktop publishing software. You can still use the Snapshot Tool to capture any images in the PDF (zoom in before capturing for the best possible quality), and insert them one by one into your new document. **BP**



▲ Adobe Reader's Select Tool lets you capture from a PDF file as text characters rather than a bitmap image



▲ Fonts are made up of coordinates and curves – each font is more like a map of what each letter should look like, rather than a photo. As a result, the edges stay smooth and sharp no matter what size you view them at. The bottom-left text has been enlarged to 500 per cent compared to the top text. Converting to a bitmap and then enlarging by 500 per cent results in extremely blocky text (bottom-right)

Office Service Pack 3 is causing problems

Q As reported in *News, Shopper* 238, Microsoft has issued Service Pack 3 for Office.

I have been a heavy user of Office 2003 and Internet Explorer 7 under Windows XP for ages without the slightest difficulty. Recently, however, I have encountered a number of inexplicable problems. These have only occurred since installing the SP3 update. I've read some Microsoft Knowledge Base articles, but these all recommend editing the Registry, which I'm loathe to do.

Faults include an Access denied error message when I try to open email attachments. Links in emails have also stopped working. How can I fix this?

Colin Hague

A Service Pack 3 (SP3) for Office 2003 has caused problems for a number of users. So far as we can tell in our investigations, following installation of the Service Pack, Office blocks attachments created in some older versions of the software. If you are thinking of installing SP3, make sure you create a system restore point beforehand.

However, for those of you who have installed SP3 and now have problems, we have a few suggestions. The first important point is that while it may make you mad enough to spit, Microsoft has put these fixes in the service pack only because there are security vulnerabilities in the earlier file formats, so uninstalling the service pack carries its own risks.

If you are prepared to take the risk, you can remove the service pack if you have a system restore point to which you can return. To see

whether this is an option, click on the Start menu and select Accessories, System Tools, System Restore. You'll be able to see when your system restore points were created and, if possible, choose an earlier point for restoration.

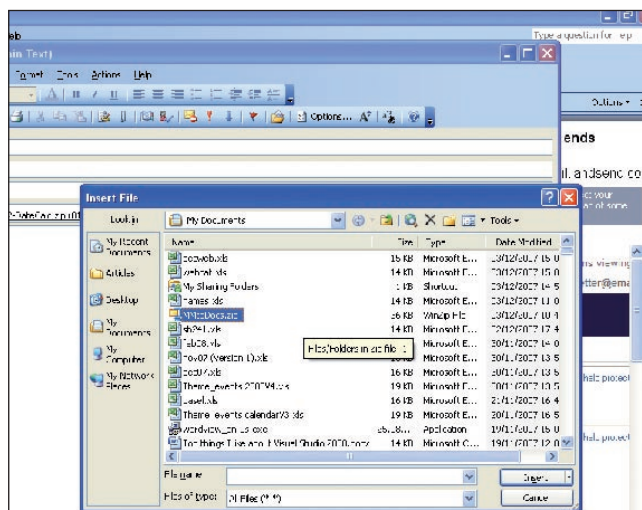
Some people have reported that they solved some problems with attachments in Outlook by using the Repair/Reinstall function just for Outlook. We can't quite see how this would work, but in your circumstances it's worth a try.

If that doesn't work, you could uninstall Office 2003, reinstall it and put only service packs 1 and 2 on to your system. You wouldn't lose any of your files, but so far as I can tell, you'd need to make sure the installation files for SP3 were removed from your machine before reinstalling. Check in the folder named C:\Windows\Installer for *.msp files. You'll

undoubtedly find lots of them, usually with uninformative names such as a52d3a.msp. You only want to remove the file for sp3 to avoid causing problems with other programs. If you hover your mouse pointer over the files, you'll see a brief comment that explains what they do.

You say you don't like the idea of editing the Registry. While we agree this can cause problems, as long as you're careful you should be fine.

The final possibility is that you ask your contacts to upgrade their copies of Office, or get them to Zip the files and attach them in that format. You can then open the Zip file and from there open the document. We know this is irritating, but to be fair to Microsoft, if it left a known security problem in its software, we'd all be very upset if hit by an attack that makes use of it. **KE**



◀ You can ask senders to attach Zip files to messages in Office 2003

Plotting trouble in the allotment

Q I recently took over as membership secretary for my local allotment society and created an Access database to hold the membership data. I then had the bright idea of creating a map of the allotment site using the up-to-date data.

My first attempt involved exporting the data set from a neat little query to a CSV text file. I then used this as my data file as input to a Microsoft Word mailmerge, rather along the lines of a labels document with each tenant member appearing in the appropriate place within a set of tables.

As I had hoped, this gave me a result of six rows of allotments with the plot number and owner's name in each cell, but it was too schematic and they asked me for something more "cartographically accurate" (their words, not mine).

Instead, I got a Google Earth photo of the allotment site and placed the image behind my text. I was then able to increase the width and height of each cell, within each of the six separate tables (one per row of allotments) until they lined up with the underlying photo.

The new version has proved very popular, but with 250 plots, Microsoft Word is creaking under the strain. The file gets regularly corrupted and minor edits of a single cell lead to entire tables being deleted. I'm pretty sure my PC is up to the task, and I am using Word 2007.

Why can't I do something similarly cartographically accurate in an Access report, so saving myself all those export problems and steering clear of Word?

John Franklin

A It may be that there are actually more suitable applications to do what you want; some graphics packages such as Adobe Flash can be programmed to accept data from an Access table. However, as you have Access, you can achieve what you want within it.

We chose to use a form rather than a report. Remember that forms aren't limited to showing data from a single record, and you can put whatever you like on to a form. Essentially, our method creates a blank form, puts an image on to the form as the background, and then adds a label for each allotment holder.

The data for where the labels should be placed on the form – and the names that each label shows – is contained in a table called Allotments. This has three main columns: the allotment holder name, the x-axis of the position of the allotment holder on the form, and the y-axis of the position of the allotment on the form.

The method uses a VBA procedure that creates a form using the CreateForm method, puts the Google Earth image as the form background, then loops through the records in the Allotments table. For each record, a label is created on the form at the location specified by the X and Y axis values, and its caption is set to the name of the holder.

There are only a couple of tricky bits about the method. The first minor problem is that the

CreateForm method creates a form of the default size of all the forms in Access, and this is unlikely to be large enough for your purposes. What you need to do is to create a new blank form and resize it until it's the right size for your needs, which might require some trial-and-error testing. Save the blank form under a suitable name, and it can be used as the template for your picture form (I used a form called sh241 as my template).

The other bit of trial-and-error testing that you'll need to carry out is to determine the x and y positions for the labels. You specify these in twips, which is a unit of measurement that is equal to 1/20 of a typographical point, or 1/1,440 of an inch. There are 567 twips in a centimetre.

When I was testing this procedure, I used values such as:

ID	HOLDER	X AXIS	Y AXIS
7	Greystones	4400	2000
2	The Grange	500	200
4	Briar Cottage	6500	850

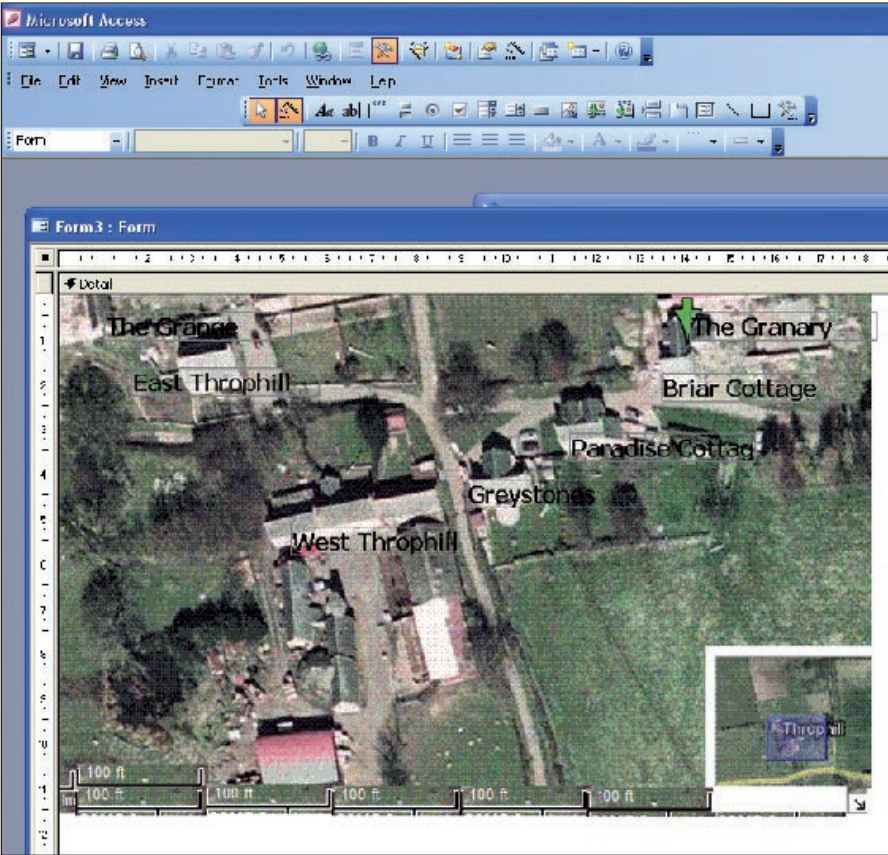
The labels on the form are created using the CreateControl method. This can be used to create any sort of control on a form, including labels. You specify where on the form the control should be created (header, detail etc), the X and Y locations in twips, and the width and height of the control:

```
Set ctlText = CreateControl(frm.name, acLabel, acDetail, , , intX, intY, 2000, 300)
```

You'll need to run the procedure to create the form every time you want to print it out with updated details:

```
Sub sh241()  
Dim frm As Form  
Dim db As Database  
Dim ctlText As Control  
Dim rs As dao.Recordset  
Set frm = CreateForm( "sh241")  
Set db = CurrentDb  
Set rs = db.OpenRecordset ("Allotments")  
frm.Picture = "C:\data\back.gif"  
With rs  
MoveFirst  
While Not .EOF  
intX = !xaxis  
intY = !yaxis  
strText = !holder  
Set ctlText = CreateControl(frm.name, acLabel, acDetail, , , intX, intY, 2000, 300)  
ctlText.FontSize = 12  
ctlText.FontBold = True  
ctlText.Caption = strText  
ctlText.Visible = True  
MoveNext  
End While  
DoCmd.Restore  
End Sub
```

I'm sure there are other interesting methods of achieving what you want, and I look forward to seeing other readers' suggestions. **KE**



▲ You can create a form where labels identify particular plots on a Google Earth photo